

Title (en)

Monobloc battery having a heat exchange device by means of a circulating fluid

Title (de)

Monoblock Batterie mit Wärmtauschvorrichtung mittels Durchleiten einer Flüssigkeit

Title (fr)

Batterie monobloc comportant un dispositif d'échange thermique par circulation d'un fluide

Publication

EP 0964460 B1 20050504 (FR)

Application

EP 99401342 A 19990604

Priority

FR 9807341 A 19980611

Abstract (en)

[origin: EP0964460A1] The battery is formed from multiple cells placed side-by-side. The flat face of each cell has raised walls (41) shaped so that when two cells are placed together a conduit (26) is formed between the cells for a cooling liquid. The end cells are covered by a plate. A common liquid delivery and collection conduit is formed by hollow sections (46) running transversely across the top of each cell.

IPC 1-7

H01M 2/02; **H01M 10/50**

IPC 8 full level

H01M 10/04 (2006.01); **F28F 3/12** (2006.01); **H01M 10/50** (2006.01); **H01M 50/112** (2021.01)

CPC (source: EP US)

B60L 50/64 (2019.01 - EP US); **B60L 58/26** (2019.01 - EP US); **F28F 3/12** (2013.01 - EP US); **H01M 10/613** (2015.04 - EP US); **H01M 10/625** (2015.04 - EP US); **H01M 10/6557** (2015.04 - EP US); **H01M 10/6567** (2015.04 - EP US); **H01M 50/112** (2021.01 - EP US); **H01M 50/26** (2021.01 - EP US); **Y02E 60/10** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP); **Y02T 10/70** (2013.01 - EP US); **Y02T 90/16** (2013.01 - EP US); **Y10T 29/49108** (2015.01 - EP US); **Y10T 29/4911** (2015.01 - EP US)

Cited by

US8835039B2; CN102301502A; FR2979983A1; FR2908557A1; EP1397841A4; EP2149771A1; EP1117138A1; EP2584644A1; US2013143093A1; US8615869B2; US8863543B2; EP2518818A1; US8197958B2; US7264901B2; WO2008059123A1; WO2010012772A1; WO2013037469A1; US6709783B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0964460 A1 19991215; **EP 0964460 B1 20050504**; DE 69925067 D1 20050609; DE 69925067 T2 20051124; FR 2779872 A1 19991217; FR 2779872 B1 20000804; JP 2000012071 A 20000114; JP 4568388 B2 20101027; US 6296968 B1 20011002

DOCDB simple family (application)

EP 99401342 A 19990604; DE 69925067 T 19990604; FR 9807341 A 19980611; JP 16437499 A 19990610; US 32753499 A 19990608